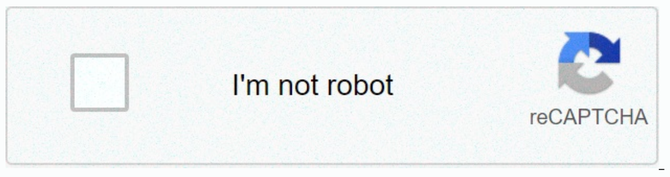

Continue

Stop code 00021a

One of the first known cipher devices is the Alberti Disc, invented by Leon Battist Alberti, in the 15th century. The device consisted of two discs, the inner one containing the mixed alphabet and the outer and second, the abbreviated alphabet and the numbers 1 to 4. The outer disc rotated to match the different letters with the inner circle that the cryptograph uses as plain text. The letters of the external disk then served as cipher text. William West/AFP/Getty ImagesDan Brown's novel The Da Vinci Code follows the adventures of a professor of symbolism as he tackles codes and ciphers, some of which break through cardano grille. Because the internal disk alphabet has been encoded, the recipient will need the same copy of the disk that the cryptographer used to decrypt the message. To make the system more secure, the cryptographer can change the alignment of the disk in the middle of the message, perhaps after three or four words. The cryptographer and the recipient would be able to change the disk settings after the prescribed number of words, perhaps first setting the disc so that the inner circle A closed with the outer circle W for the first four words, then with the N for the next four, and so on. This made cracking ciphers much harder. Cardano Lattice and steganography a clever way to hide a secret message is in plain sight. One way to do this is to use Cardano Grille - a piece of paper or cardboard with holes cut out of it. To encrypt a message, place the grid on a blank sheet of paper and type the message through the grid holes. Fill the rest of the paper with innocent text. When the recipient receives the message, he puts the same grid on it to see the secret text. This is a form of steganography, hiding a message in something else. In the 19th century, Thomas Jefferson designed a new cipher machine. It was a cylinder of discs mounted on a spindle. At the edge of each disk were the letters of the alphabet, arranged in random order. A cryptograph can align disks and spell a short message over a reel. He would then look at the next line through the cylinder, which appears to be gibberish, and send that recipient. The recipient would use the same cylinder to explain a series of nonsensical letters, then scan the rest of the reel, looking for a message spelled in English. In 1922, the United States Army adopted a facility very similar to Jefferson's; other branches of the army soon followed [source: Kahn]. Perhaps the most famous encryption device was the German Machine Enigma in the early 20th century. The Enigma Machine resembled a typewriter, but instead of letters the keys had a series of lights with a letter stamped on each. Pressing the button caused the electric current to pass through a complex system of wires and gears, resulting in encrypted Shining. For example, you can press the A key to display the light of the letter T. Photo Courtesy of U.S. ArmyGerman soliders using the Enigma machine in this area. What made the Enigma Machine such an impressive encryption device was that once you press the sheet, the rotor in the machine would turn, changing the electrode contact points inside the machine. This means that if you press A a second time, another letter will light up instead of T. Every time you typed a letter, the rotor turned around, and after a certain number of letters, the second rotor plugged in, then the third. The device has allowed the operator to switch between the way letters are inserted into the device, so when you press one letter, the device interprets it as if you were pressing another letter. How did a cryptanalyte crack such a heavy code? In the next section we will learn how codes and ciphers are broken. Advertising Just when we thought the development was boring and done, together comes a plet large number of new liability devices, tablets, pads, smart devices and phones. Apple, with it the iPhone and iPad, turned the thermostat for developers. Apple... I am in Tokyo Japan for my daughter Molly's graduation from the International Christian University (ICU). While I'm in town, I'm meeting with members of the Japanese developer press to talk about IT technology innovation and... There are many internet lists of the best programming and software engineering books. Amazon also has its list of best-selling computer programming books. I've also blogged on this subject in the past: Six must have computer science... We - software engineers, computer scientists, programmers, developers and coders of the world - declare that 1) we strive to build great software, 2) we care about the software that we develop and supply to our users, and 3) we ... In The End of SQL Databases – Part 1, I covered some SQL background and relational databases, current status and future for relational databases, the rise of frameworks that hide some complexities... Under Sql End and Relational Database? (Part 1 of 3) I've covered some background on SQL language and relational databases, current and future for relational databases, the rise of frameworks that hide some of the... The journey to SQL began with a paper by Dr. E.F. Codd, a relational data model for large shared data banks, published in ACM Communications in June 1970. His colleagues at IBM, Donald Chamberlin and Raymond Boyce were... Happy New Year and decade to all software developers. I hope a lot of success software development in 2010. Over the holiday break, I spent some time thinking about the tools that I use for my own development. In my work on ... Does the world need a new beginner programming language? In the 1960s, Basic, FORTRAN, LISP and ALGOL were programming languages. In the 1970s and 1980s, Pascal, C, Smalltalk and the system were teaching ... When I ask developers what programming language are you using?, the answer I often get is one language. Most developers are defined as java, C++, Delphi, C#, Visual Basic, PHP, Ruby, or Python developers. Some web ... A C++0x Language Standards Committee meeting is being held this week in downtown Santa Cruz, California, near where I live. C++0x is the informal name for a more formal designation: ISO/IEC JTC1/SC22/WG21 - Standards C++... Touch apps have been here for decades. You can see many of these early one-off apps in supermarkets, bank ATMs, restaurants and airport check-in kiosks. With the advent of iPhone and Windows 7, multitouch ... The title of this blog, once again to the Code, is a modification of the introductory line from King William Shakespeare Henry V, Act 1 Scene 1, which begins once more to violate, dear friends, once more; or close the wall with ... Load more than web developers we all love the code; That's why we do what we do. I suppose we're all trying to be the best we can be. Working in a fast-paced environment at BKWLD, our team of developers must learn to adapt in an instant to meet deadlines, most of which arrive a little faster than we would like. I'm often forced to try to slip the line between doing something good and doing it quickly. This is expected to be achieved, which is sometimes true. More often than not, however, I am forced to lean more to one side, choosing to either do something clean and beautiful, or do something that is complete when the client needs it. Cyber Monday Deals: Check out all the best deals right now! Which approach is better? Our technical director, Justin Jewett, summed it up perfectly when he said to me, We need fewer killers and more street fighters. Jewett points out that we need people who can code quickly, roll with punches and do the best possible job - something that is particularly difficult when things warm up and clients are less than friendly. This has led to many intense discussions about the right approach. Poetry is goodThere is why a good code is considered a form of poetry. It is elegant, clean, easy to read and fun to write. These are all exceptional qualities that we should strive for every day. This approach is philosophically correct. If the code is structured well from the start then, late in the game, things are easier to find and edit. For example, creating a JavaScript file to hold down all config-level variables is good practice, so debugging things like animation speed and delaying the duration of a later breeze. Speed's goodSpeed is often overlooked and/or argued around among devs. An easy way to do things is often seen as bad or amateurish. Shortcuts and hacks further cloudy, and their practitioners are considered by the community to be bad developers. I'm an advocate of rapid development for many reasons, a boss who is getting things done on time - or soon. This leaves more room for polishing, and can make both manufacturers and clients very happy. Not everything fits into the conventionCreation framework undoubtedly accelerates development and makes things faster, but not everything fits into a clean, packaged convention. There are times when simple picture tag, spreadsheets, or even (dare I say?) frames are quick solutions to a problem that would take much longer to build using standards or some new innovative workflow. I worked on sites that were too complex for their need and context. Not everything requires complex environments, Python frames, or minified concatenated scripts with cache-busting hash. All of these things have their place for specific projects, but a good dev has to choose what is best for the scale of the project, rather than just using the most complex technology in all cases. Find out what's right for your project When considering the project you're working on, think about what your needs are and where you should spend most of your time. For example, if a page doesn't need complex JavaScript, don't add a framework to load scripts and modules that will take some time and power to set up. Instead, a simple script file or even some inline JavaScript will work just fine. This way the requirements are met and you can spend more time on the rest of the site. If the project is personal, you are intensely passionate, spend all the time you want to make sure every line of code is where it should be and is reduced to its purest possible form. If the project is for a three-month campaign that must be completed next week, the shortest path to the finish line is probably the best. I've only been a developer for five years, and 95 percent of my professional projects are latter. We must complete the quality of the work as soon as possible. Words: Matt AebersoldMatt Aebersold is a developer at BKWLD. This article originally appeared in net magazine issue 246.Liked it? Read these! What is your philosophy of code? Tell us in the comments! Comments!